WHAT IS CLAIMED IS:

1.   In a computer system, a method of combining first and second filtering trees, comprising:

determining whether two nodes at a topmost level of each

5   of the first and second trees are both OR nodes, and if so,

providing a resulting OR node of a single resultant filtering tree;

merging each child node of the first tree with a child node of the second tree into a merged node when such nodes can

10   be successfully combined, and adding each merged node to the resulting OR node as a child node thereof; and

adding each child node of the first tree and each child node of the second tree that cannot be successfully combined to the resulting OR node as a child thereof;

15   and if the topmost nodes are not both OR nodes,

evaluating each topmost node.

2.   The method of claim 1 further comprising, merging child nodes beneath a merged node into a merged child node

20   when child nodes can be successfully combined.

3.   The method of claim 1 wherein merging each child node that can be successfully combined includes performing a union of a set of data points of each node.

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4.   The method of claim 1 wherein evaluating the topmost

nodes determines that one node is an OR node, and further

comprising, treating the other topmost node as a single child

5   of an OR node.

5.   The method of claim 1 wherein evaluating the topmost

nodes determines that neither topmost node is an OR node, and

further comprising, determining whether the two topmost nodes

10   represent a same event variable.

6.   The method of claim 5 wherein the two topmost nodes

do not represent the same event variable, and further

comprising, providing an OR node, and adding the first and

15   second trees to the OR node as children thereof.

7.   The method of claim 5 wherein the two topmost nodes

represent the same event variable, and further comprising,

merging the two topmost nodes into a merged node.

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8.   The method of claim 7 wherein merging the topmost

nodes includes performing a union of a set of data points of

each node.

9.   The method of claim 7 further comprising merging child nodes at each level of children below the merged node into a merged child node when such child nodes can be merged.

5   10.   The method of claim 1 further comprising, traversing the resultant filtering tree with actual event data.